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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,896	06/02/2006	Koji Nagao	KIT-405	9602

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EXAMINER	
MEHTA, HONG T	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
12/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,896	NAGAO ET AL.	
	Examiner	Art Unit	
	HONG MEHTA	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *1-13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *14-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *October 21, 2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to applicant's remarks filed on October 21, 2009. Pending new claims 14-22 are under examination. Claims 1-13 are cancelled.

Claim Objections

1. Claim 17 and 18 are objected to because of the following informalities: claim, 17 (line 2), there should be a space between "10%of". In claim 18, the word "stream" should be "steam". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "L value" in claim 20 is a relative term which renders the claim indefinite. The term "L value" is not defined by the claim, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear the "L value" is directed to the roasted coffee beans before or after treatment.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 14, 15, 18, 19, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by White et al. (US 3,615,665) as evidenced by Sivetz et al. (Coffee Processing Technology, 1963)**.

7. **Regarding claim 14 and 15**, White et al. discloses a method for treating roasted coffee beans, both whole roasted bean and ground roasted coffee particles (col. 1, ln. 66-67) by recovering desirable volatiles to enhance the coffee extract, soluble coffee or flavor additives for food product (col. 1, ln. 72-75). White et al. discloses heating roasted coffee in a confined vessel "apparatus" under pressure (col. 2, ln. 10-11) and introducing steam, (col. 2, ln. 35-40) through steam inlet line (col. 5, ln. 20) "steam supply passage" into a vessel until predetermined pressure is achieved, and contact with coffee beans and pressure is relieved by venting line (col. 2, ln. 26-27; col. 5, ln. 22) "steam exhaust passage". White et al. discloses the passing steam through the vessel, at temperature form 240°F to 350°F (115°C and 177°C) (col. 2, ln. 24-26), wherein the pressure in vessel above atmospheric pressure by continuing flow of steam into the vessel (col. 2, ln. 36-38; col. 2, ln. 64-67).

8. **Regarding claims 18 and 21**, White et al. discloses the temperature is maintained at least as high as the temperature of saturated steam (col. 2, ln. 48-49). Also, the range of temperatures (115-177 Celsius) overlaps with the claimed temperature range.

9. **Regarding claim 19**, it is further expected that the process of White et al. in steam treatment of roasted coffee beans would fall within the scope of claim, since the claimed end product may encompass a wide range of amount of acids, in particularly

volatile acids, formic and acetic acids. Due to the natural presence of a preservative in coffee beans, it is further expected that the amount of the same in the product by process of White et al. would provide the same amount. The ratio of claim 19 would be expected in the coffee beans as produced by the method of White et al. as the method steps are commensurate as is the material treated. Further, it is known in the art of coffee processing evidenced by Sivetz et al. to have roasted coffee beans with volatile acids, formic and acetic acids (pg. 232, paragraph 3) wherein the amount with about 0.04% wt. of roasted coffee (pg. 233, lines 4-6), which is less than 0.25% wt of roasted coffee beans.

10. **Regarding claim 20**, the L values are inherent properties of the roasted coffee bean prior to the method are not considered a limitation of the process claims. White et al. teaches whole and ground roasted coffee beans in the treatment, therefore White is commensurate with the claimed invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. (US 3,615,665).**

White et al. discloses the claimed invention as discussed above in claim 14. White discloses roasted coffee includes both whole roasted beans and ground roasted coffee bean particles (col. 1, lines 66-67). White discloses ground roasted coffee beans with particle size wherein 97% of coffee was retained on 40 mesh U.S. Standard Screen (col. 4, lines 69-71) which is equivalent to standard sieve opening of 0.420 mm, hence White's ground roasted coffee beans are capable of passing through the mesh opening of 1.7 mm.

White et al. does not disclose a roasted coffee bean comprising whole roasted bean **and** ground roasted bean as cited in the claim. However, it would have been

obvious to one of ordinary skill in the art that starting material choices, such as a blend of whole roasted coffee bean and ground coffee bean with specific particle sizes prior to White's steam treatment is adjustable to form a combined desired flavor and aroma notes contributed by whole and ground roasted coffee beans.

5. **Claims 17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. (US 3,615,665) as evidenced by Sivetz et al. (Coffee Processing Technology 1963) as applied to claims 14 and 19 above, and in further view of McCartney (US 3,420,674 A).**

6. **Regarding claims 17 and 22**, White et al. disclose the claimed invention as discussed above to claim 14 and 19. White et al. does not disclose the amount of steam to roasted coffee beans as cited in the instant claims.

7. However, McCartney discloses an extraction process of roasted and ground coffee comprising water saturated steam to remove residual acids (col. 1, lines 15-19; lines 62-65) and steam temperatures about 180°F to 230°F (82°C to 110°C) (col. 2, lines 60-61).

8. McCartney teaches weight ratio of extracting steam to roasted and ground coffee beans, amount of 22.2%. McCartney discloses a formulation with 400 grams of steam (col. 3, line 49-50) to 1800 grams (col. 3, line 43) roasted ground coffee beans. Therefore, McCartney discloses an amount of the steam is at least 10% of the weight of the roasted coffee beans.

9. McCartney teaches a process with the amount of steam to roasted coffee beans, an amount of at least 10% of weight of roasted coffee beans and steaming temperature

about 110°C for reducing acidity in roasted coffee beans for an acceptable levels of volatile acids (col. 1, lines 45-49). It would have been obvious to a person of ordinary skill in the art of the time of the inventions to add the features taught by McCartney to the White's treatment of roasted coffee beans, as McCartney teaches adjusting the ratio of steam to beans is successful for achieving acceptable flavor, aroma character and contains an acceptable level of volatile acids, intermediate solids and insoluble coffee solids (col. 1, lines 57-61).

Response to Arguments

10. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection. Applicant cancelled claims 1-13 and added new claims 14-22.

11. In response to applicant's argument that McCartney's steam distillation is different from steam treatment on roasted coffee for reducing acidity component, Examiner disagrees. McCartney's discloses steam temperature ranges in which properties of steam vapor temperatures are the same properties in both steam distillation and steam treatment to roasted coffee, but in different apparatus.

12. In response to applicant's argument that Sivetz does not teach steam treatment to roasted coffee beans, Examiner agrees. However, Sivetz's disclosure is relied upon for the known teaching that roasted coffee beans comprise volatile acids, including formic acid and acetic acid.

13. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HONG MEHTA whose telephone number is (571)270-

7093. The examiner can normally be reached on Monday thru Thursday, from 7:30 am to 4:30 pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Htm

/Jennifer McNeil/
Supervisory Patent Examiner, Art Unit 1794